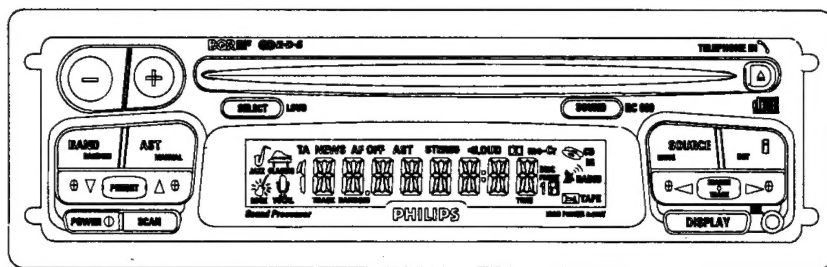


Service Service Service



For repair information of the CD-player see Service Manual of the CDM-M2 mechanism

Service Manual

12 V 

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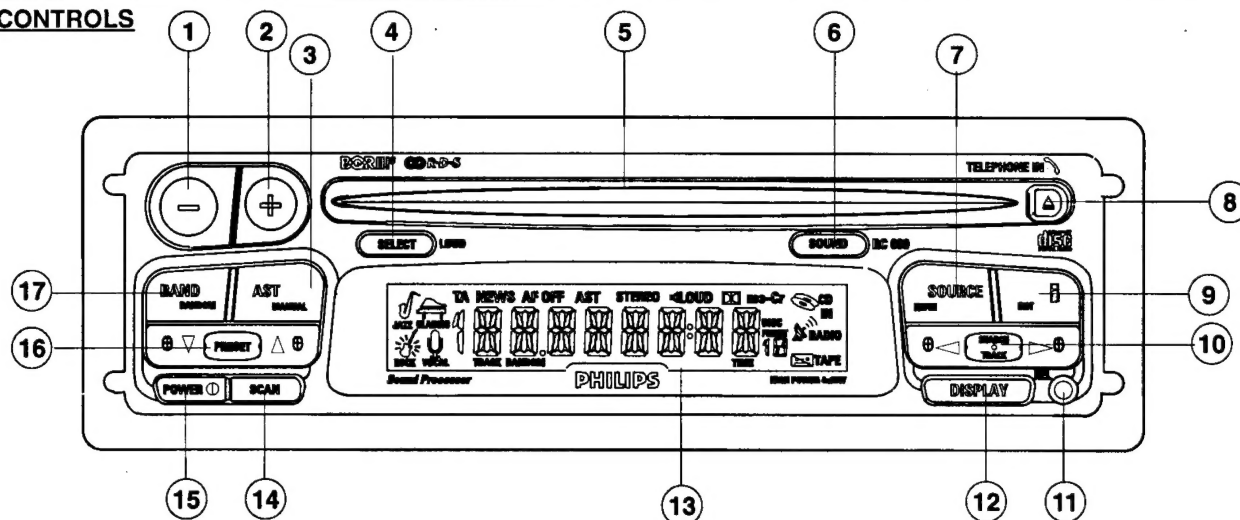
COMPACT
disc
DIGITAL AUDIO

CLASS 1
LASER PRODUCT



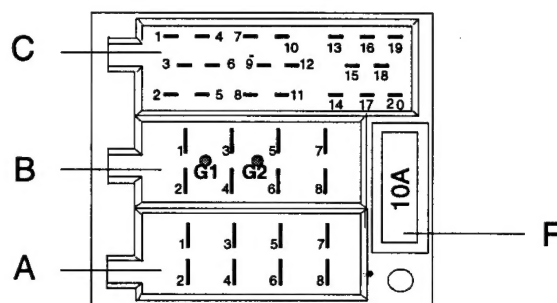
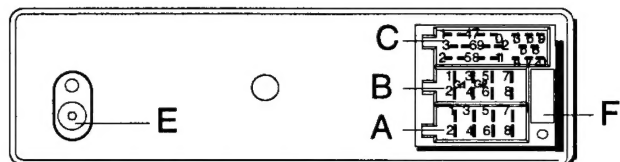
PHILIPS

CONTROLS



- | | | | |
|----|--------------------------------------|----|------------------|
| 1 | VOL- | 13 | DISPLAY |
| 2 | VOL+ | 14 | SCAN |
| 3 | AUTOSTORE / MANUAL | 15 | ON / OFF |
| 4 | AUDIO SELECTION / LOUDNESS | 16 | PRESET SELECTION |
| 5 | CD OPENING | 17 | BAND / RANDOM |
| 6 | SOUND | | |
| 7 | SOURCE SELECTION / MUTE | | |
| 8 | EJECT DISK | | |
| 9 | TRAFFIC INFORMATION NEWS / INIT MODE | | |
| 10 | SEARCH / TRACK | | |
| 11 | RELEASE BUTTON FOR DETACH UNIT | | |
| 12 | FREQUENCY / PTY | | |

CONNECTIONS



- | | | | |
|----|--------------------------------|----|---------------|
| A1 | Phone Mute | B1 | Rear Right + |
| A2 | Remote Ground | B2 | Rear Right - |
| A3 | Remote Input | B3 | Front Right + |
| A4 | +12V Permanent | B4 | Front Right - |
| A5 | +12V Switched (antenna supply) | B5 | Front Left + |
| A6 | | B6 | Front Left - |
| A7 | +12V Ignition Key or Permanent | B7 | Rear Left + |
| A8 | Ground | B8 | Rear Left - |

- | | | |
|----|---------------|------------|
| C1 | Line out RL | |
| C2 | Line out RR | |
| C3 | Line out GND | |
| C4 | Line out FL | RC669 only |
| C5 | Line out FR | RC669 only |
| C6 | +12V SWITCHED | |

- | | | |
|-----|-----------------|------------|
| C18 | Input reference | |
| C19 | Input telephone | RC669 only |
| C20 | Input telephone | |

- G1 Gateway
G2 Gateway

E Aerial Plug

F Fuse 10A

TECHNICAL DATA

GENERAL

Power supply :14.4V DC
Dimensions :180x150x51.8 mm

CD

CD mechanism :CDM-M2
Crosstalk at 1KHz :60 dB
16-20KHz :50 dB

RADIO

LW : 144-288 KHz
MW : 531-1629 KHz
FM : 87.5-108 MHz
IF-AM : 450 KHz / 10.7 MHz
IF-FM : 10.7 MHz / 72.2 MHz
Sensitivity 26dB S/N : 26 μ V (LW)
: 18 μ V (MW)
: 3,4 μ V (FM)
Limitation α -3dB : 4 to 12 μ V

AMPLIFIER

Output power :4x18W / 4 Ω (THD = 10%)
Loudness :+7dB \pm 3dB at 60Hz
:+0dB \pm 3dB at 10kHz
Treeble control :12 \pm 3dB at 10kHz
Bass control : 10 \pm 3dB at 60Hz
Balance control :50 +0-20dB
Fader :50 +0-20dB
4X line out RC669 only
2X line out RC634 - 639
Line in mono RC669 only

ESD



WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.

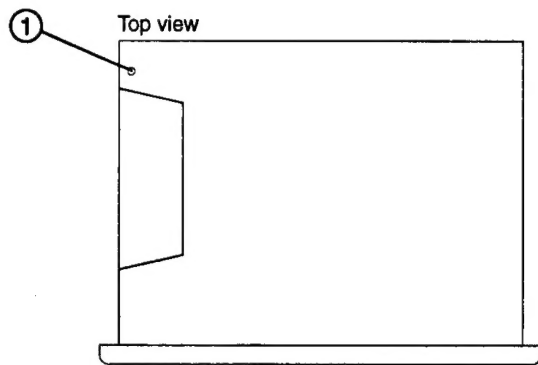
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

ESD equipment available:

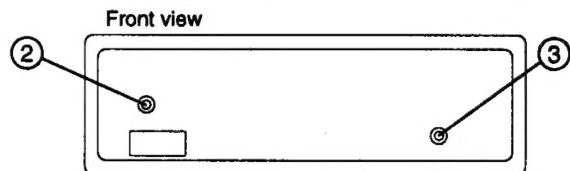
Anti-static table mat large 1200X650X1.25mm	4822 466 10953
small 600X650X1.25mm	4822 466 10958
Connection box (1Mohm)	4822 395 10223
Extendible cable (to connect wrist band to connection box)	4822 320 11307
Connecting cable (to connect table mat to connection box)	4822 320 11305
Earth cable (to connect any product to mat or box)	4822 320 11308
Complete kit ESD3 (combining all above products)	4822 310 10671
wristband tester	4822 344 13999

22RC634/00-22RC639/00
22RC639/17-22RC669/00

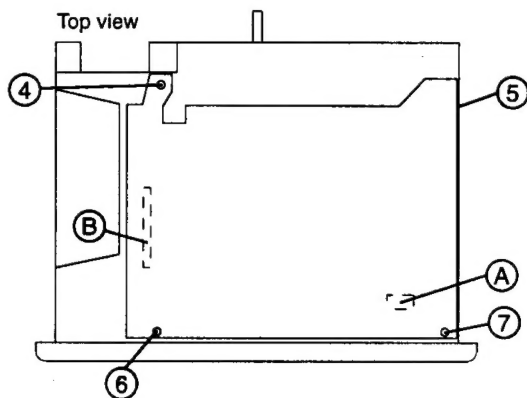
REMOVING THE PWB



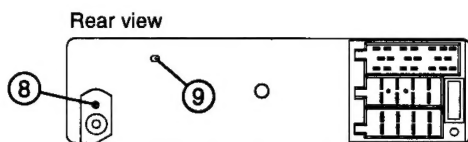
Remove the cover top (screw 1) and the cover bottom



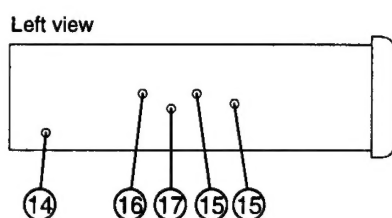
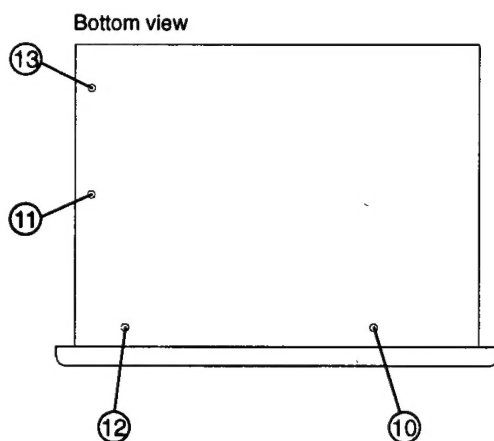
Remove the fixed front (screws 2 and 3)

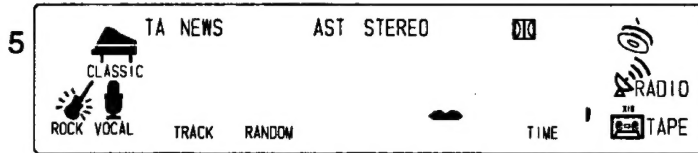
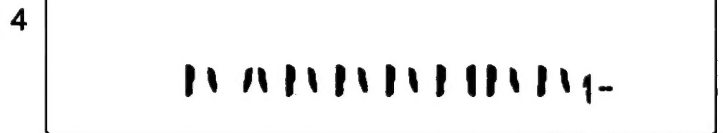


Remove the deck (screws 4,5,6 and 7)
Disconnect the A connector
Disconnect the B connector



Remove the antenna plug bracket (screws 8)
Remove the main PWB (screws 9 to 17)





The last screen shows all segments lit.
To quit this mode, switch Off the set.

3) FIELD TEST

This test is called by pressing simultaneously ▲ and DISPLAY keys (set On).

The display shows:

4 digits indicating the tuned frequency

5th digit: Selected frequency quality

6th digit: Best AF quality

7th digit: Multipath 0..F (0 = no multipath)

8th digit: Field level 0..F (F = best fieldstrength)

This test can be exited by switching Off the set or by pressing again presets keys 2 and 5 at the same time.

4) SOFT VERSION AND CHECK SUM INDICATION

This test is called by pressing simultaneously SCAN and DISPLAY keys (set On)

The display shows two screens during 2 seconds each.

The first screen shows the last four number of the soft version.

The second screen shows the check sum.

DEMO MODE:

This mode is called by switching the set On while keeping pressed the DISPLAY Key.

The set displays in sequence all its features.

To exit this mode, switch the set OFF and follow the same procedure as for calling this mode (DISPLAY Key + set On).

CHECKS AND ALIGNMENTS

No alignment is needed for radio part. IC96 tuner is pre-aligned.

For all measurement, please refer to "General Check & Alignment procedures for Car Systems" 4822 725 25456, unless otherwise stated.

Checks:

- Supply voltages (set Off)

SET OFF	Voltage	Current + Acc ON	V reset Pin 4 μ P	Vdd Pin 40 μ P	V hold Pin 8 μ P	Current + Acc OFF
Acc supply	+14.4V	< 3mA	min Vdd x 0.7	min 4.5V max 5.5V	max Vdd x 0.3	< 2mA

- Supply voltages (set On)

V reset pin 4 μ P	V pin 40 μ P	V hold pin 8 μ P	V 5V E 7417	V 8.5V E 7418	V EEprom pin 8
max Vdd x 0.7	min 4.5V max 5.5V	min Vdd x 0.7	min 4.7V max 5.4V	min 8.0V max 8.9V	min 4.5V max 5.5V

- Reference oscillator frequencies

device	μ P 7500	SAA6579 7260	MSM6307 7600 (RC659 only)
pin	3	13	25
frequency	8 MHz 0.5%	4.332 MHz 20ppm	6 MHz 0.5%

- Line out (RC659 and RC629 only)

Conditions: 98MHz, fm = 1KHz, Δf = 11.25KHz, lines outputs loaded with 10k resistors.
Output = 500 mV \pm 2dB at volume max.

CD part

Audio Signal Disk 1 4822 397 30184	Crosstalk : Disk 1 track 67 to 71	limit : < -60dB	nominal : < -30dB
---------------------------------------	-----------------------------------	-----------------	-------------------

Test CD	Test	Result
Eccent-music 150um 4822 397 30279	Insert disk and play track 01	No failure
Vertical deviation 4822 397 30282	Check loading, display of number of tracks and total time. Select track no 9 time 00.20 listen to the disk during 4 seconds	no electrical nor mechanical noise

FM part

- Demodulated FM levels

Input	Output of IC96 (pin 15 & 16)
98 MHz	300 mV \pm 50 mV

- Limiting point α -3dB

Range	Input	min	nominal	max
87.5 to 108 MHz	1Khz	4 μ V	7 μ V	12 μ V

- Check of search levels

Search levels	Input	Dx: 7 μ V < X < 23 μ V Local : 120 μ V < X < 360 μ V
	98 MHz	

- Pause detector

f = 94MHz fm = 1KHz	$\Delta f = 0.6\text{KHz}$	Pin 6 of 7230 < 0.8V
	$\Delta f = 3.5\text{KHz}$	Pin 6 of 7230 > 2.0V

AM part

- Usable sensivity 26dB S/N

Sensivity at 26dB S/N	207 KHz	m = 30%	1KHz	< 38 μV	typ 28
	1053 KHz			< 30 μV	typ 22

- Check of search levels

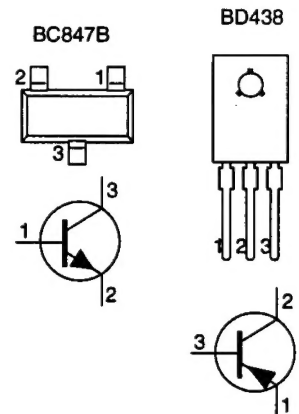
Conditions: start with set in FM DX mode. change to AM = 1053KHz

Search levels	Input	low : 35 μV < X < 140 μV high : 7 μV < X < 28 μV
	1053KHz	

INTEGRATED CIRCUITS

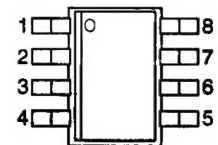
SAA6579T Radio Data System demodulator

SYMBOL	PIN	DESCRIPTION
QUAL	1	quality indication output
RDDA	2	RDS data output
V _{ref}	3	reference voltage output (0.5 V _{DDA})
MPX	4	multiplex input signal
V _{DDA}	5	+5V supply voltage for analog part
V _{SSA}	6	ground for analog part (0V)
CIN	7	subcarrier input to comparator
SCOUT	8	subcarrier output for reconstruction filter
TCTR	9	test control
TEN	10	test enable
V _{SSD}	11	ground for digital part (0V)
V _{DDD}	12	+5V supply voltage for digital part
OSCI	13	oscillator input
OSCO	14	oscillator output
T57	15	57kHz clock signal output
RDCL	16	RDS clock output



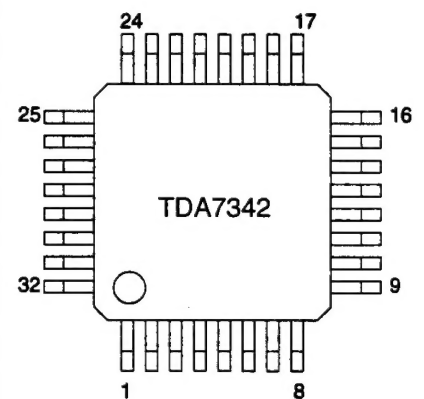
MC4558 Dual op amp

PIN	DESCRIPTION
1	Output 1
2	Inverting input 1
3	Non inverting input 1
4	Vcc -
5	Non inverting input 2
6	Inverting input 2
7	Output 2
8	Vcc +



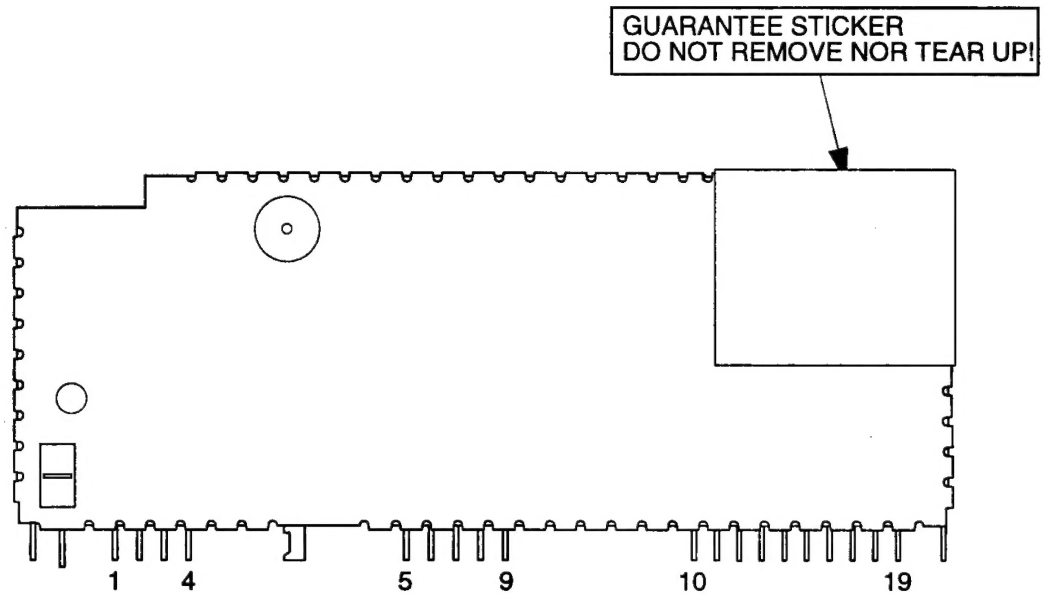
TDA7342 Digitally controlled audio processor

SYMBOL	PIN	DESCRIPTION	SYMBOL	PIN	DESCRIPTION
TR R	1	Treble control capacitor right	BIN L	17	Bass control input left
IN R	2	Input right	BOUT L	18	Bass control output left
OUT R	3	Output right	BIN R	19	Bass control input right
LOUD R	4	Input loudness, right control part	BOUT R	20	Bass control output right
IN R3	5	Input 3 right source (CD)	SM	21	Soft mute control
IN R2	6	Input 2 right source	OUT RR	22	Output rear right
IN R1	7	Input 1 right source	OUT LR	23	Output left right
MONO	8	Input mono source	OUT RF	24	Output right front
LOUD L	9	Input loudness, left control part	OUT LF	25	Output left front
CD GND	10	Ground input CD	DIG GND	26	Bus ground
IN L3	11	Input 3 left source (CD)	SDA		I2C Data
IN L2	12	Input 2 left source	SCL	28	I2C Clock
IN L1	13	Input 1 left source	CREF	29	Supply reference capacitor
CSM	14	Soft mute control capacitor	Vs	30	Supply voltage
IN L	15	Input right	GND	31	Ground
OUT L	16	Output left	TRL	32	Treble control capacitor left



IC96 MODULE

Not reparable module. Do not open and do not try to repair yourself!



Connections

2	Ground	10	Multiplex / RDS output signal
5	Inlock detector pin	11	Level
6	Vcc 8.5V	12	I ² C SDA
7	Ground	13	I ² C SCL
8	Vcc 5.0V	15	tuner output L
		16	tuner output R
		17	Ground

Quick reference data:

1) AM part

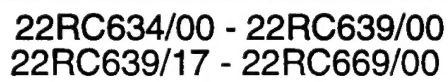
- Longwave/Mediumwave 144-1710 KHz (inclusive USA)
- Shortwave 5850-6250 KHz - 49 meter band
- AM double super concept
- AM IF1 10.7MHz
- AM IF2 450KHz
- First VCO frequency above input signal frequency
- Second X-tal oscillator frequency below IF1
- Usable sensitivity $\alpha 26\text{dB}$ MW = 14 μV typ.

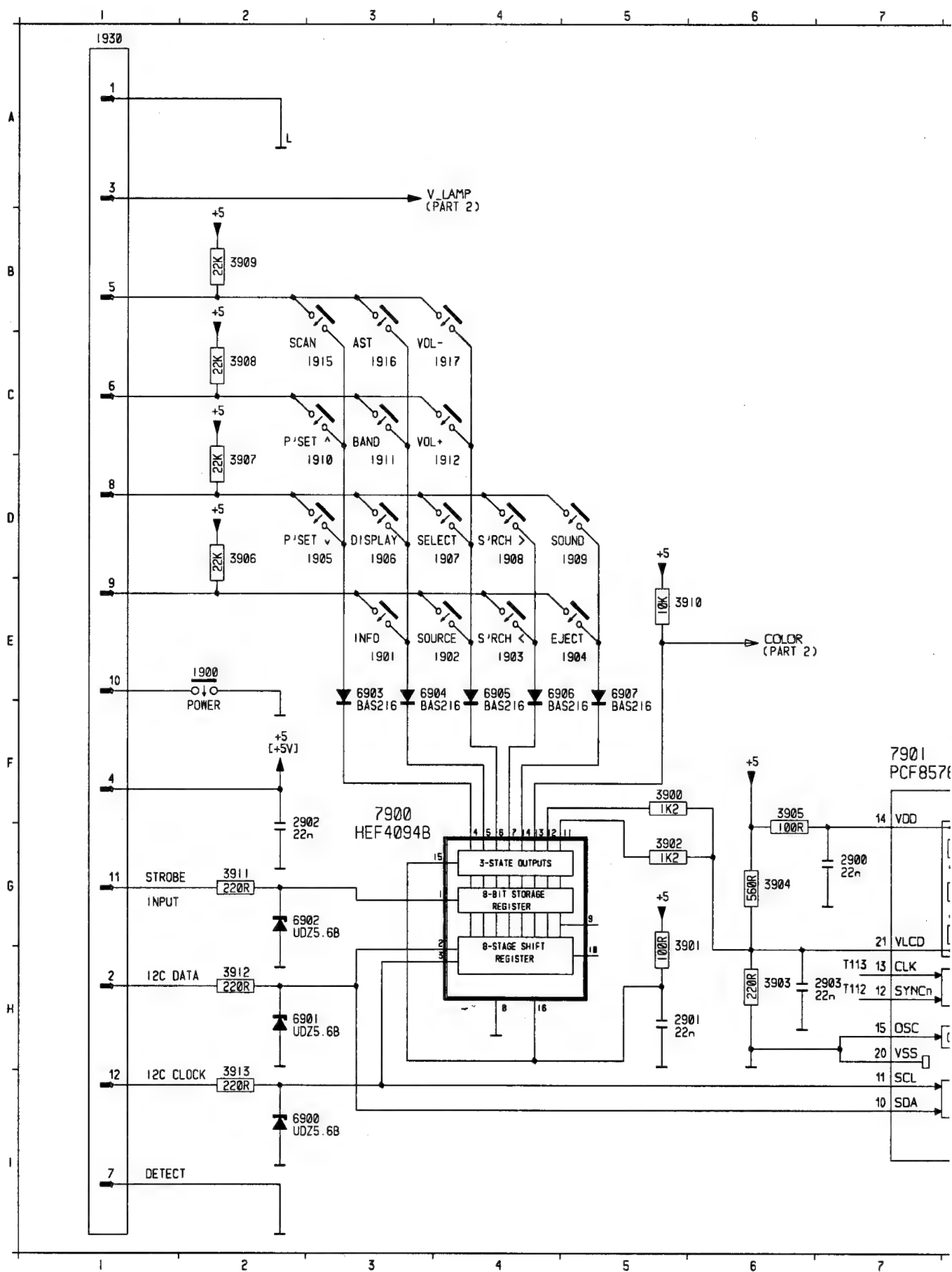
1) FM part

- FM 87.5 - 108MHz
- FM double super concept
- FM IF1 72.2MHz
- FM IF2 10.7MHz
- First VCO frequency above input signal frequency
- Second X-tal oscillator frequency below IF1
- Usable sensitivity $\alpha 26\text{dB}$ = 2.5 μV typ.
- THD 1mV $\delta f = 75\text{KHz}$ = 0.5% typ
- Signal to noise ratio = 65dB typ
- Locktime synthesizer < 2mSec

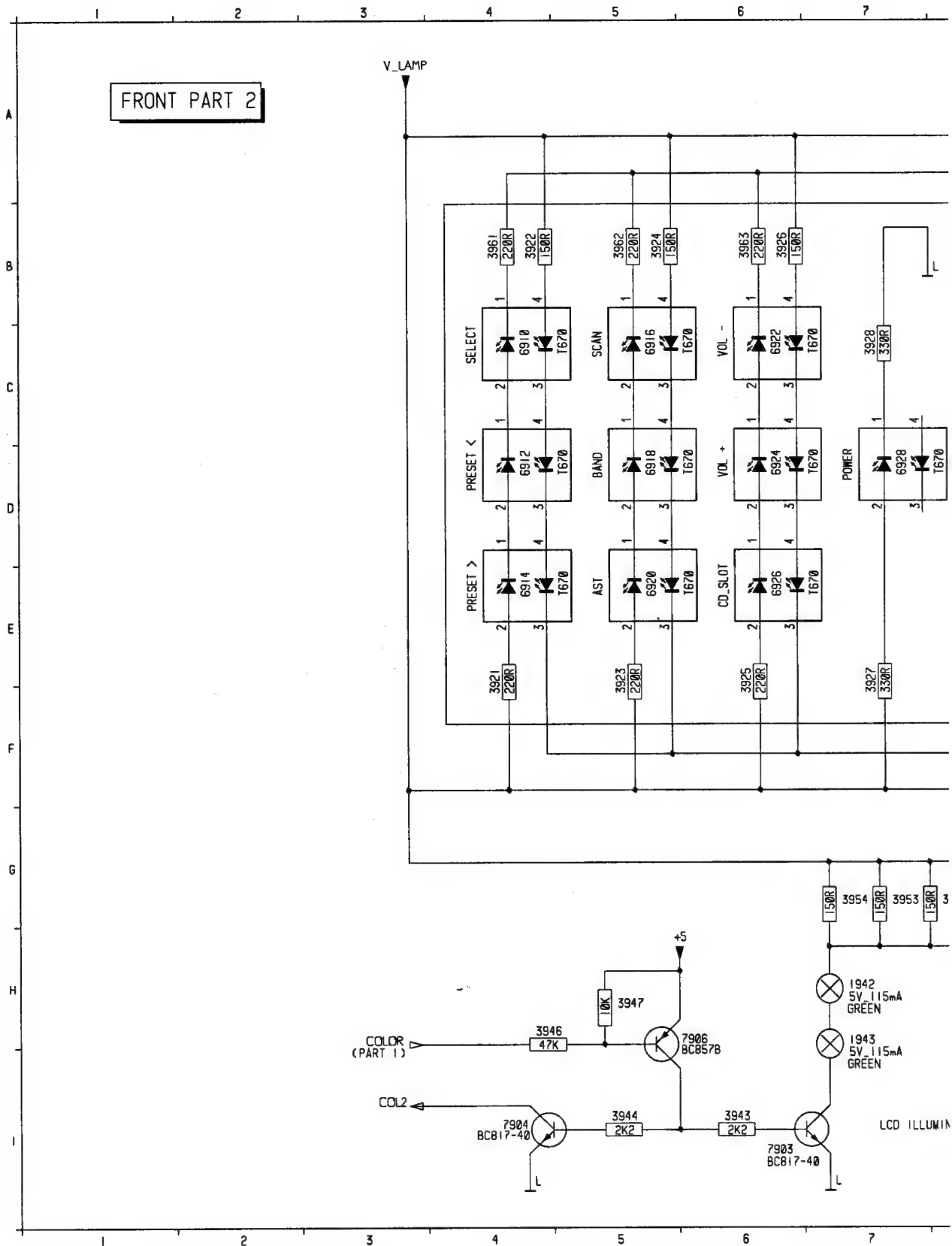
TUNER PART

[TU00]



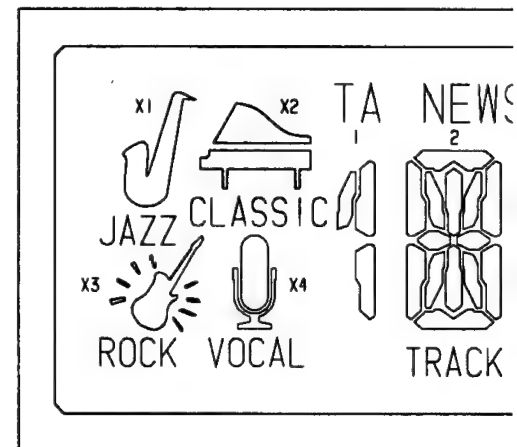


PART 1 : FULL DETACHABLE FRONT



PART 2 : FULL DETACHABLE FRONT

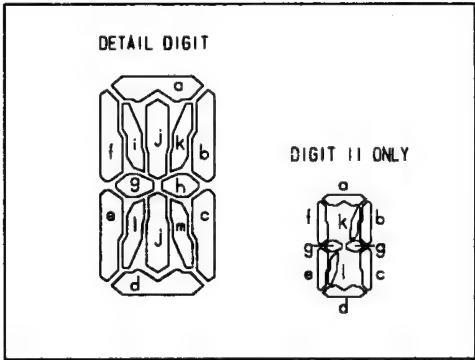
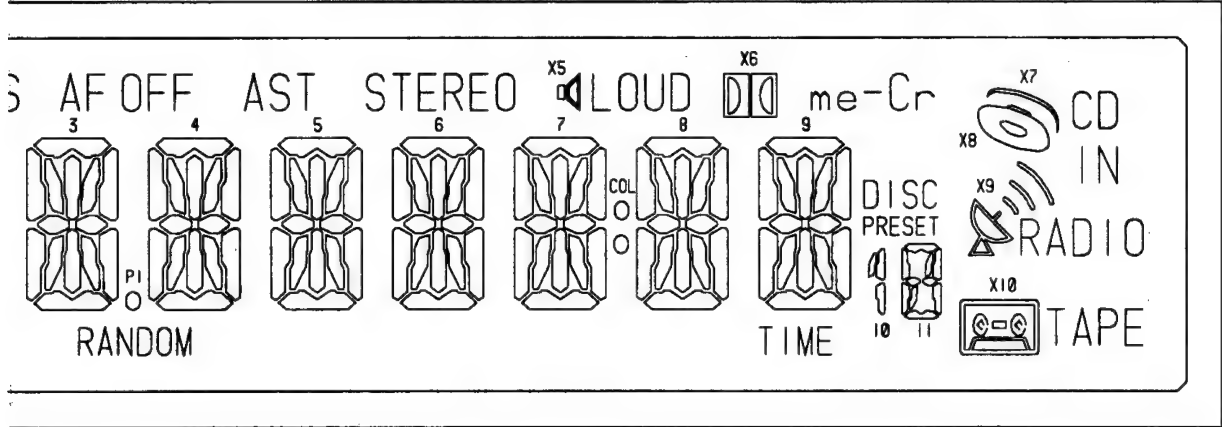
7901 DRIVER PINS	1920 LCD PINS	COM 1	COM 2	COM 3	COM 4
3	1	COM 1			
2	2		COM 2		
49	3			COM 3	
64	4				COM 4
50	5	2f	2g	2e	1 b c k
63	6	2i	2j	2l	TA
51	7	2a	2k	2m	2d
52	8	2b	2h	2c	TRACK
62	9	3f	3g	3e	NEWS
53	10	3i	3j	3l	AF OFF
60	11	3a	3k	3m	3d
54	12	3b	3h	3c	RANDOM
61	13	4f	4g	4e	PI
59	14	4i	4j	4l	AST
58	15	4a	4k	4m	4d
57	16	4b	4h	4c	CLASSIC, X2
56	17	5f	5g	5e	JAZZ, X1
55	18	5i	5j	5l	ROCK, X3
47	19	5a	5k	5m	5d
46	20	5b	5h	5c	VOCAL, X4
45	21	6f	6g	6e	11d
44	22	6i	6j	6l	TAPE, X10
43	23	6a	6k	6m	6d
42	24	6b	6h	6c	RADIO, X9
41	25	7f	7g	7e	IN
40	26	7i	7j	7l	STEREO
39	27	7a	7k	7m	7d
38	28	7b	7h	7c	
37	29			COL	
34	30	8f	8g	8e	LOUD, X5
35	31	8i	8j	8l	X6
36	32	8a	8k	8m	8d
32	33	8b	8h	8c	
31	34	9f	9g	9e	me-Cr
30	35	9i	9j	9l	X7
29	36	9a	9k	9m	9d
28	37	9b	9h	9c	TIME
27	38	DISC	PRESET	10 b c k	CD, X8
26	39	11g	11k	11f	11e
25	40	11c	11b	11a	11f

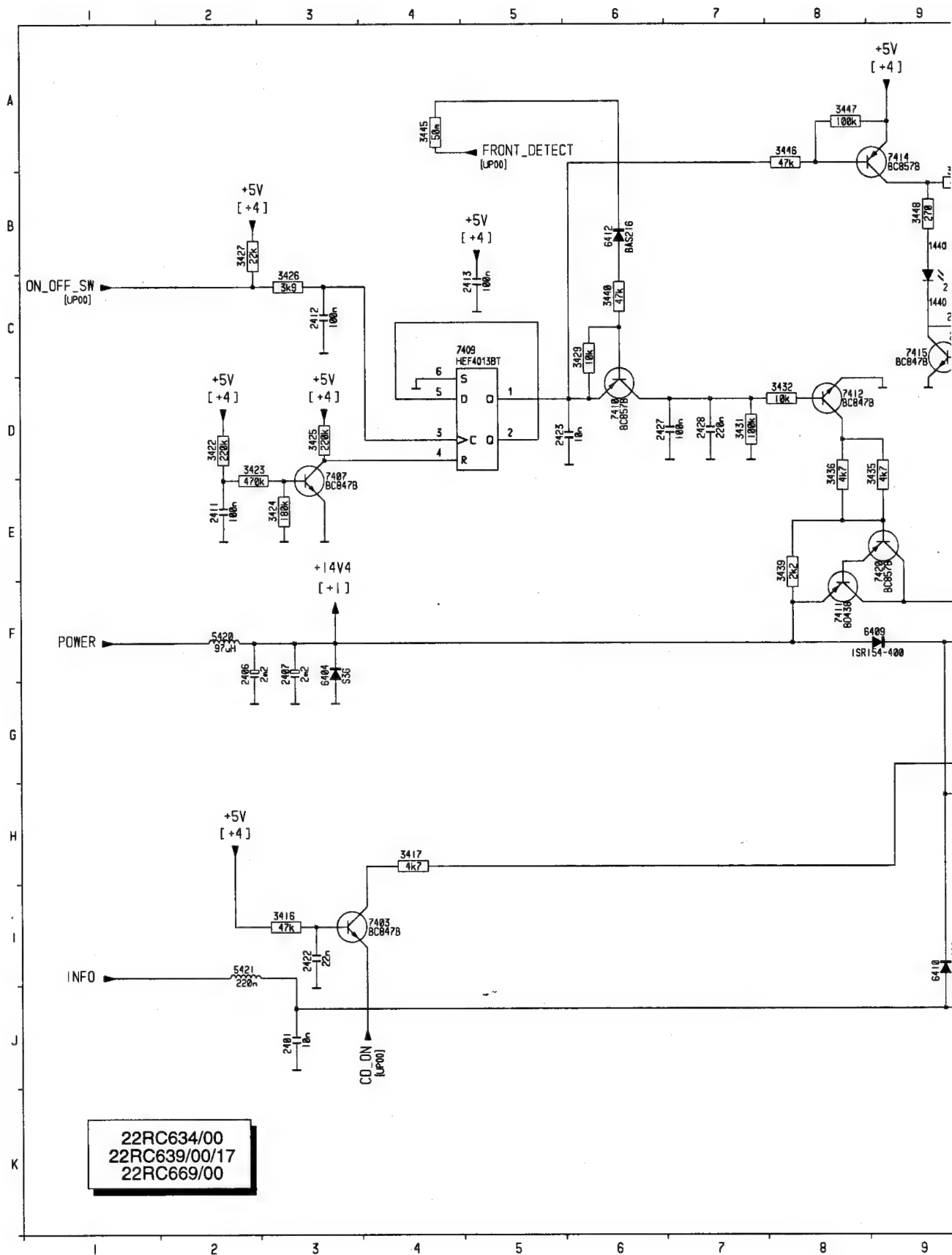


PART 3 : LCD GRAPHIC & PIN-OUT TABLE

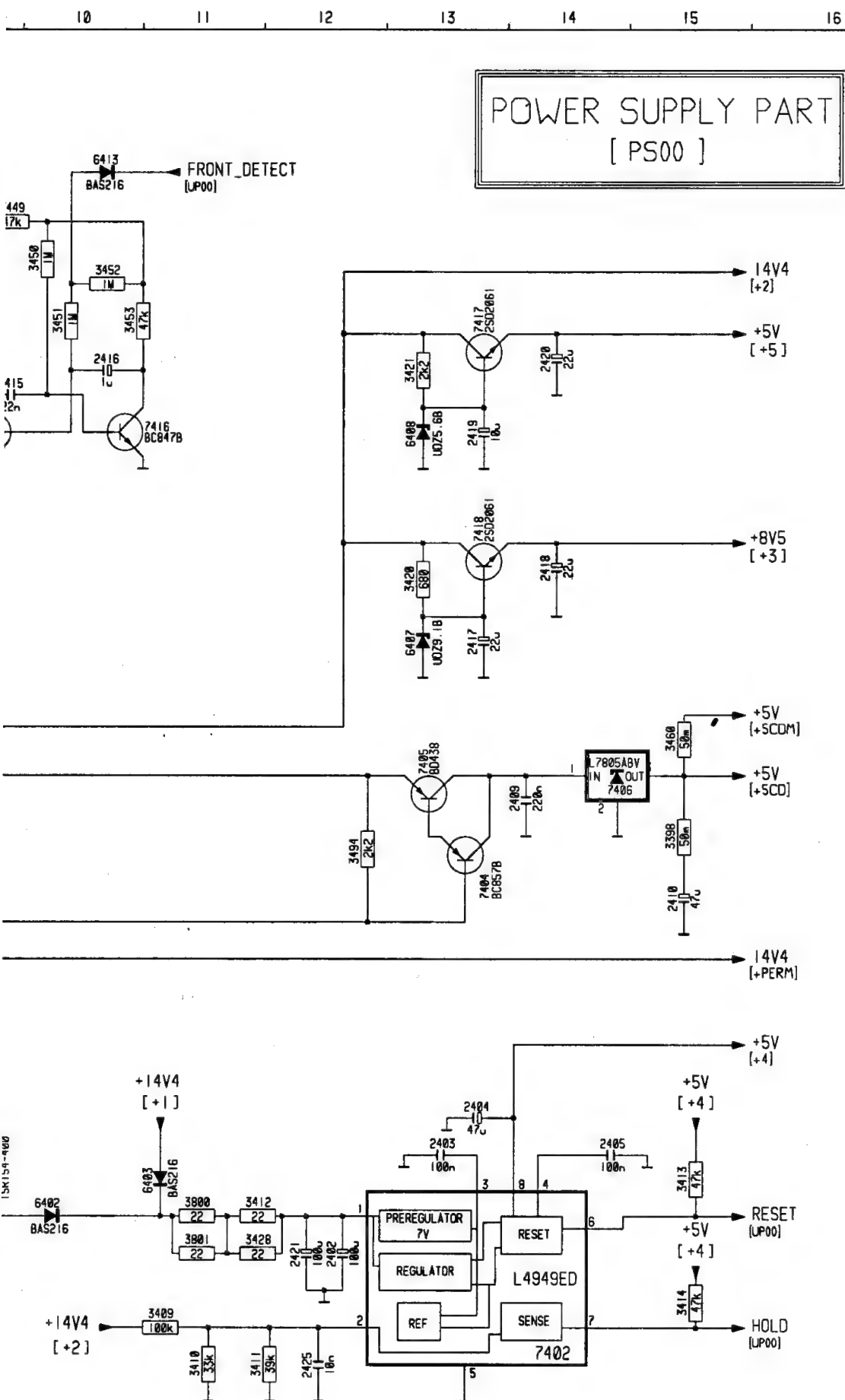
FRONT PART 3

22RC634/00 - 22RC639/00
22RC639/17 - 22RC669/00





22RC634/00
22RC639/00/17
22RC669/00



1440	B 9	6408	C13
1440	C 9	6409	F 9
2401	J 3	6410	I 9
2402	J12	6412	B 6
2403	I13	6413	A10
A			
2404	I13	7402	K14
2405	I14	7403	I 4
2406	F 2	7404	G13
2407	F 3	7405	F13
2409	F14	7406	F15
B			
2410	G15	7407	E 3
2411	E 2	7409	C 4
2412	C 3	7410	D 6
2413	C 5	7411	F 8
2415	C 9	7412	D 8
C			
2416	C10	7414	A 9
2417	E13	7415	C 9
2418	D14	7416	C11
2419	C13	7417	C13
2420	C14	7418	D13
D			
2421	J12	7420	E 9
2422	I 3		
2423	D 5		
2425	K12		
2427	D 6		
E			
2428	D 7		
3398	G15		
3409	K11		
3410	K11		
3411	K11		
F			
3412	J11		
3413	I15		
3414	J15		
3416	I 3		
3417	H 4		
G			
3420	E13		
3421	C13		
3422	D 2		
3423	D 2		
3424	E 3		
H			
3425	D 3		
3426	C 3		
3427	B 2		
3428	J11		
3429	C 6		
I			
3431	D 7		
3432	D 8		
3435	D 9		
3436	D 8		
3439	E 8		
J			
3440	C 6		
3445	A 4		
3446	A 8		
3447	A 8		
3448	B 9		
K			
3449	B 9		
3450	B10		
3451	B10		
3452	B10		
3453	B10		
3460	F15		
3494	G12		
3800	J11		
3801	J11		
5420	F 2		
5421	I 2		
6402	J10		
6403	I11		
6404	F 3		



10 11 12 13 14 15 16

POWER SUPPLY PART [PS01]

22RC634/00
22RC639/00/17
22RC669/00



1400 A 1
1401 C16
1401 D16
2470 B 1
2471 C 3
A
2473 J10
2476 D 6
2477 D 7
3471 G 2
3472 H 2
3473 H 2
3475 I 9
B
3476 G 5
3481 E 6
3483 D 5
3484 D 6
3485 D 7
3489 A 6
C
6473 F 6
6474 D 6
6478 G 2

D

E

F

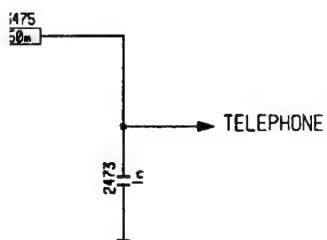
G

H

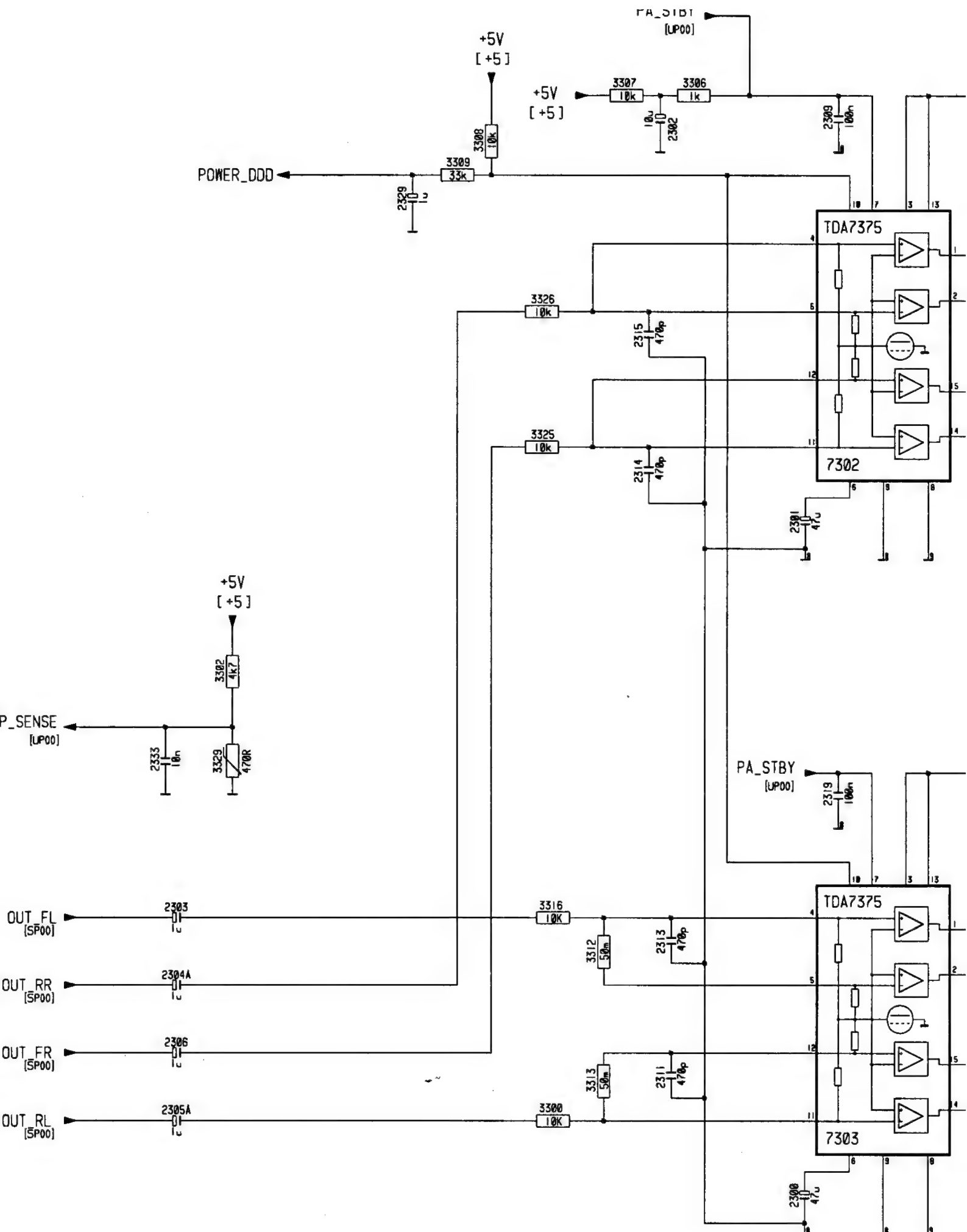
I

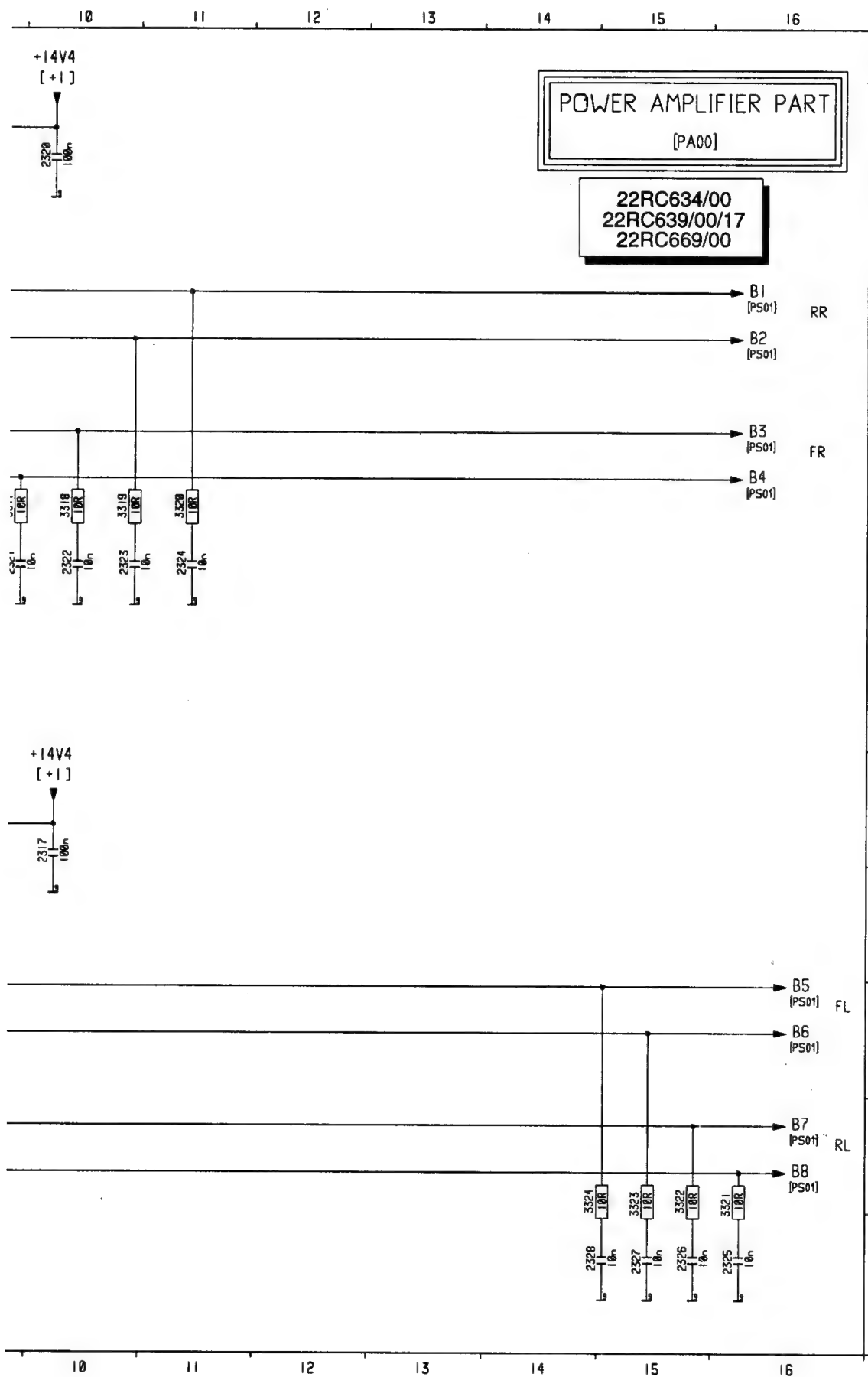
J

K



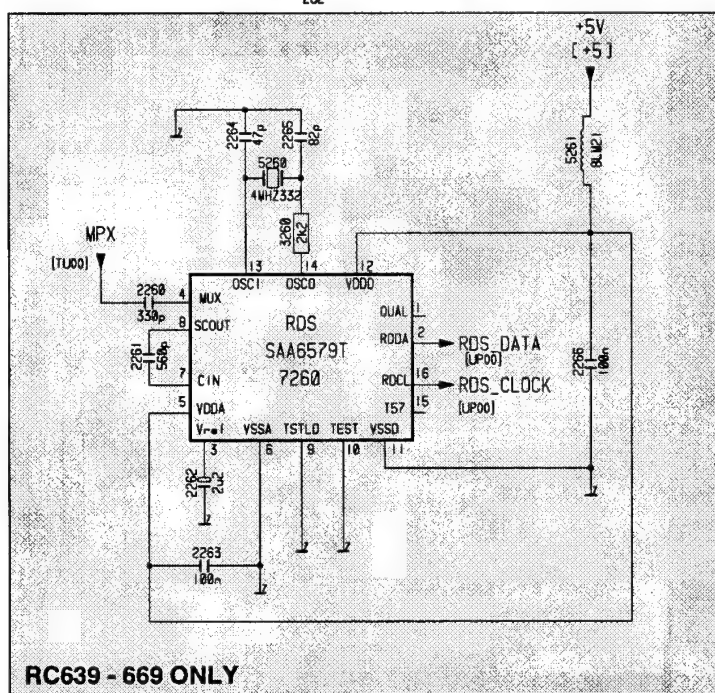
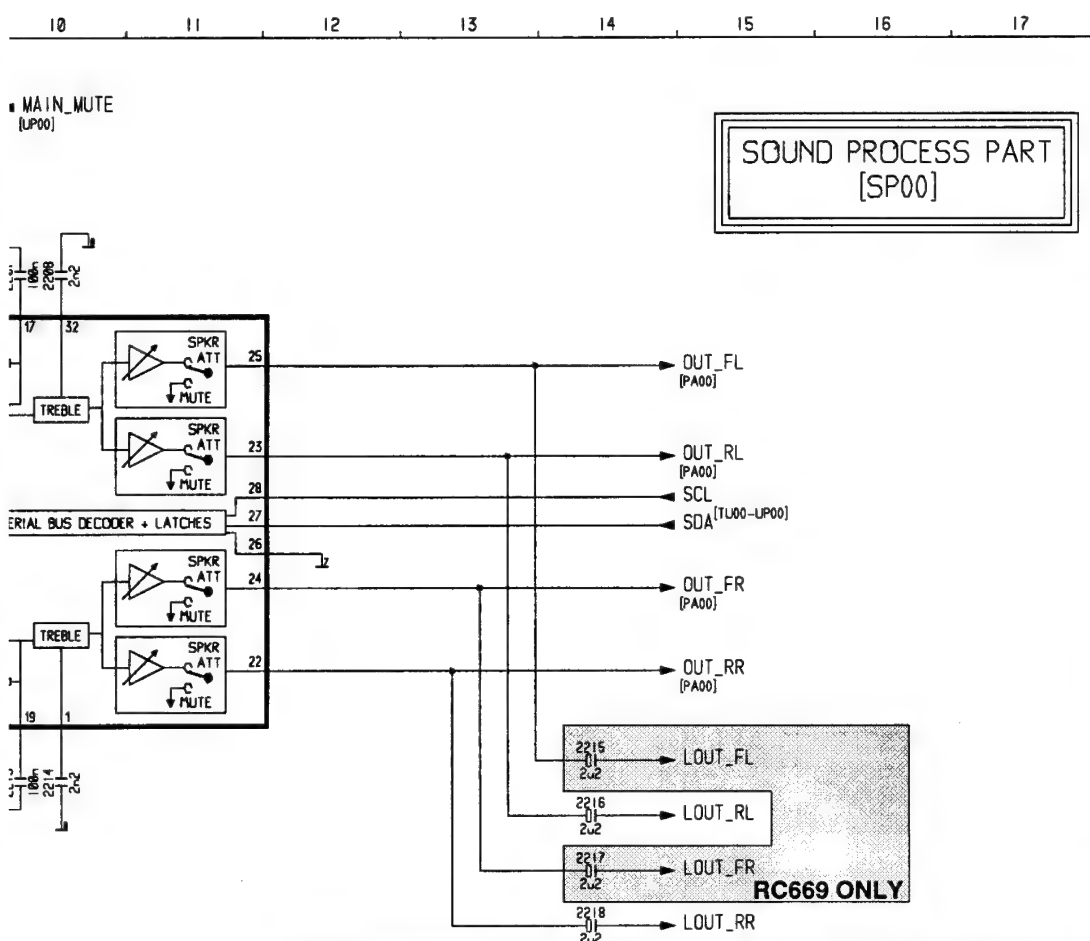
10 11 12 13 14 15 16





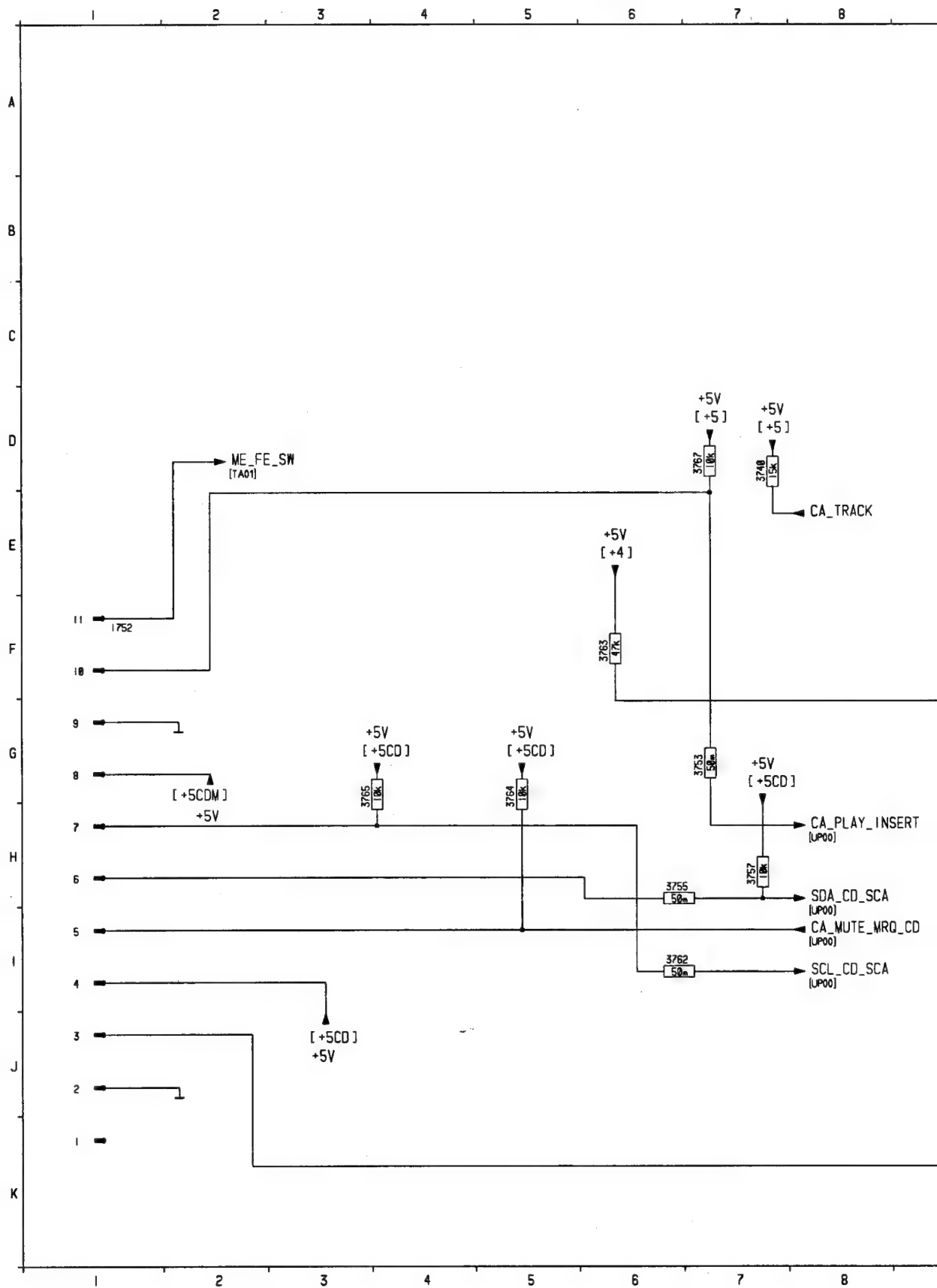
2300	K 8
2301	E 8
2302	A 6
2303	H 2
2304	I 2
A	
2305	J 2
2306	J 2
2309	A 8
2311	J 6
2313	I 6
B	
2314	D 6
2315	C 6
2317	G 10
2319	G 8
2320	A 10
C	
2321	E 9
2322	E 10
2323	E 10
2324	E 11
2325	K 16
D	
2326	K 15
2327	K 15
2328	K 14
2329	B 4
2333	G 2
E	
3300	J 6
3302	F 3
3306	A 7
3307	A 6
3308	B 5
F	
3309	B 5
3312	I 6
3313	J 6
3316	H 6
3317	D 9
G	
3318	D 10
3319	D 10
3320	D 11
3321	J 16
3322	J 15
H	
3323	J 15
3324	J 14
3325	D 5
3326	C 5
3329	G 3
7302	D 8
7303	J 8

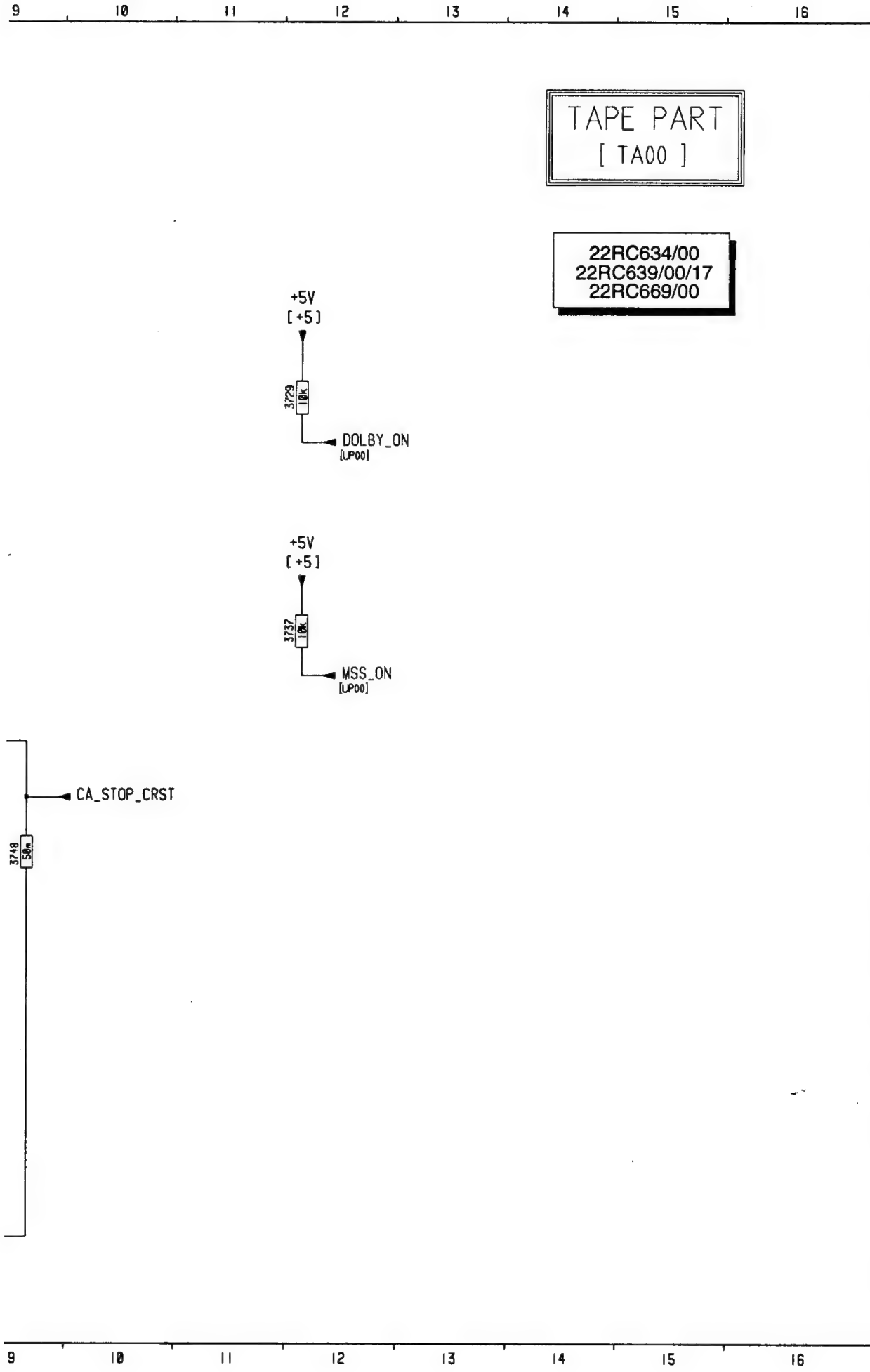




1200	A 2
2202	F 6
2203	E 7
2204	B 8
2205	B 9
A	
2206	B 9
2207	B10
2208	B10
2209	E 8
2210	E 9
B	
2211	E 9
2212	E 9
2213	E10
2214	E10
2215	E14
C	
2216	F14
2217	F14
2218	F14
2220	B 5
2222	E 5
D	
2223	C 2
2225	C 2
2226	D 2
2227	D 5
2228	C 4
E	
2229	D 4
2260	I13
2261	I13
2262	J13
2263	K13
F	
2264	H13
2265	H14
2266	I16
3200	A 9
3201	F 9
G	
3202	C 1
3203	D 1
3204	D 1
3206	D 5
3207	A 9
H	
3208	B 3
3209	D 2
3234	G 7
3238	E 3
3239	E 3
I	
3260	H14
5260	H14
5261	H16
6200	E 6
7200	B 6
7260	I14
J	
K	





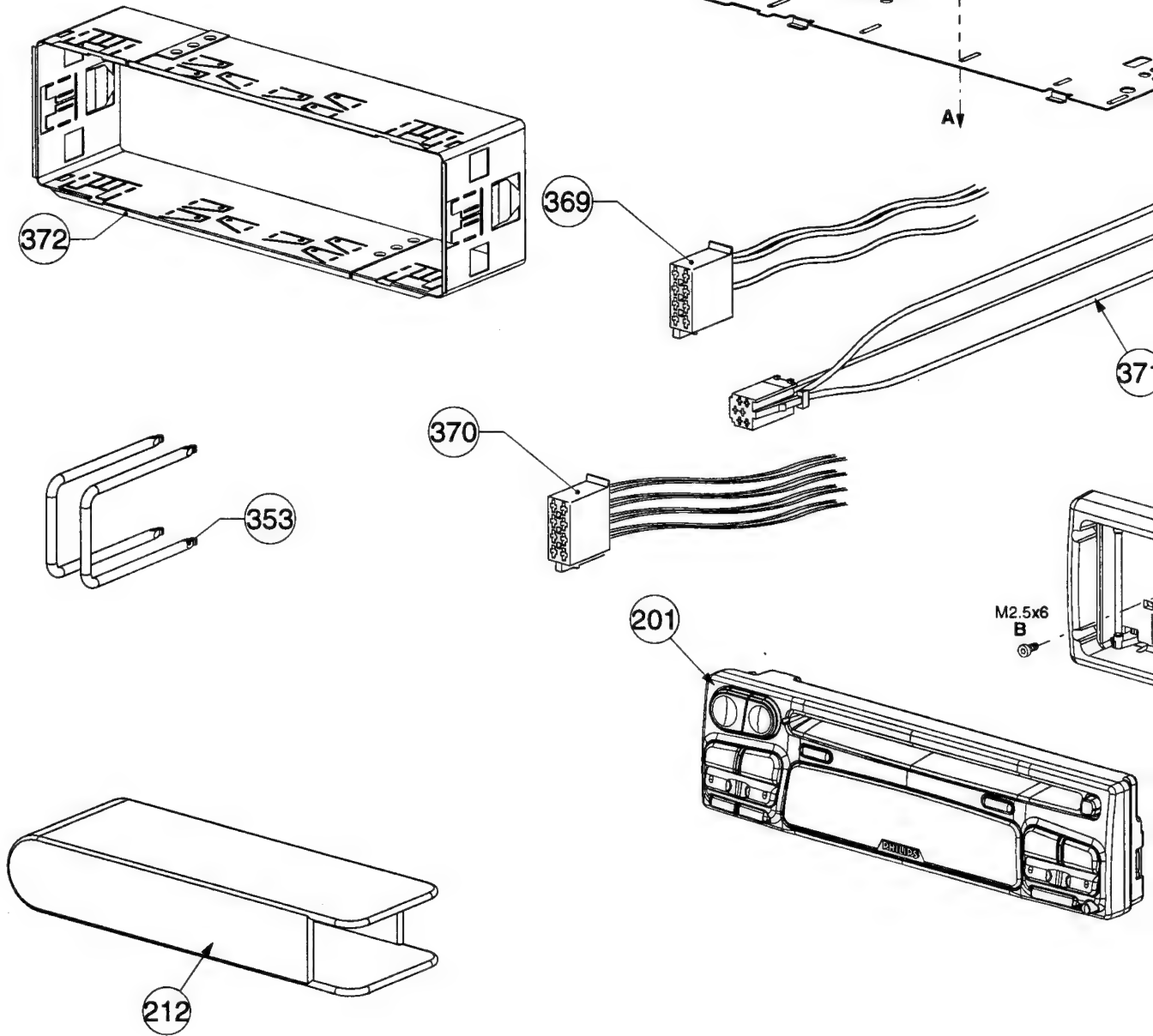


TAPE PART
[TA00]

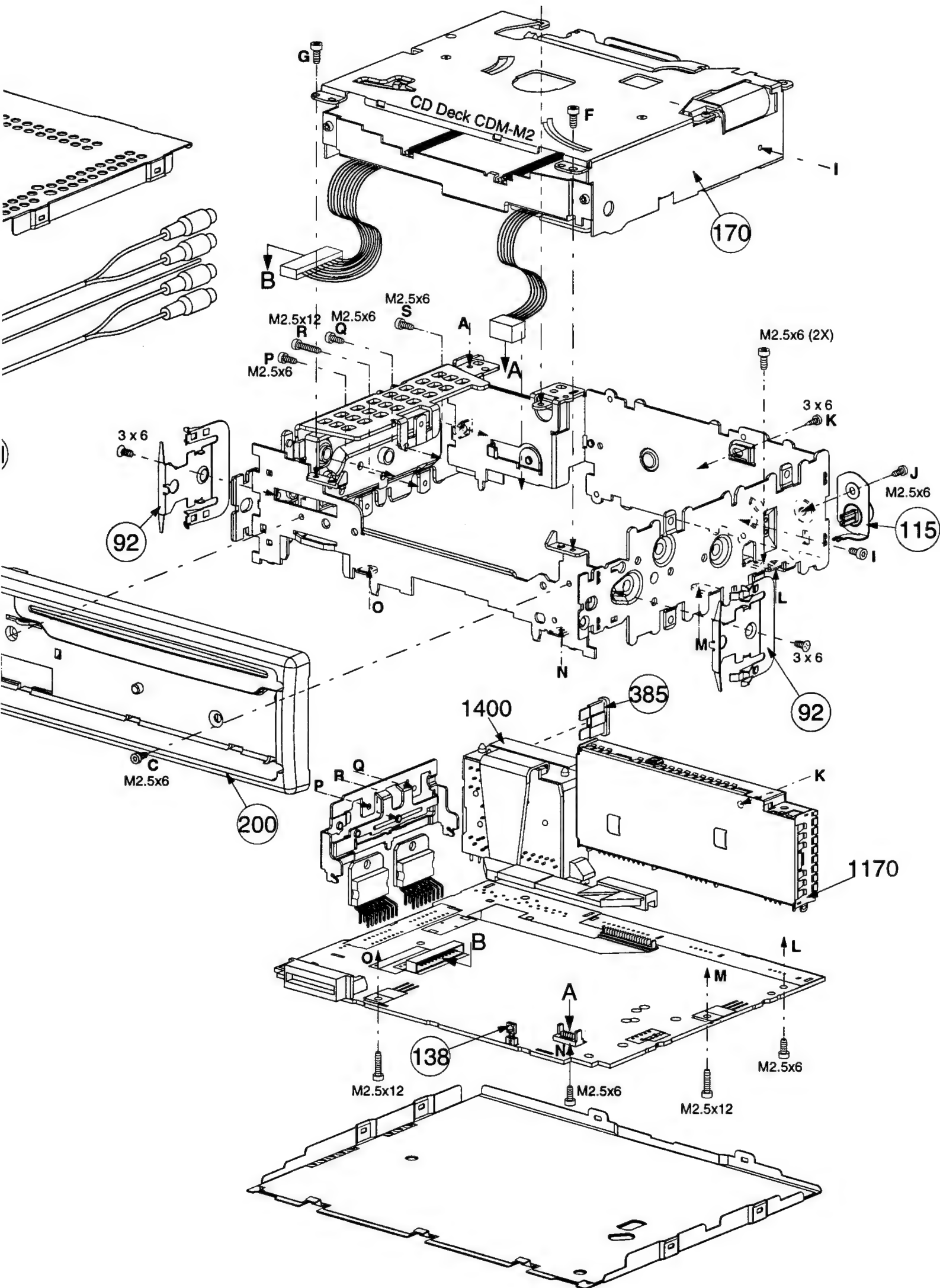
22RC634/00
22RC639/00/17
22RC669/00

1752	F 1
3729	C12
3737	F12
3740	D 7
3748	H 9
A	
3753	G 7
3755	H 6
3757	H 7
3762	I 6
3763	F 6
B	
3764	G 5
3765	G 3
3767	D 7



22RC634/00 22RC639/00
22RC639/17 22RC669/00















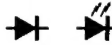


92	4822 492 71046	SPRING MOUNTING (X2)	353	4822 404 20437	DEMOUNTING BRACKET (X2)
115	4822 265 10717	CONNECTOR AERIAL ASSY	369	4822 321 11012	CABLE ADAPTOR POWER
138	4822 130 82996	BLINKING LED TLPR5620	370	4822 320 11637	CABLE ADAPTOR LOUDSPEAKERS
170	4822 691 10662	DECK ASSY CDM-M2	371	4822 320 11902	CABLE LINE-OUT (ONLY RC634 - 639)
200	4822 459 05109	FIXED FRONT ASSY (RC639 RC669)	371	4822 320 12211	CABLE LINE-OUT (ONLY RC669)
201	4822 459 05116	DETACHABLE UNIT ASSY(RC634/00)	372	4822 443 30463	SLEEVE
201	4822 459 05111	DETACHABLE UNIT ASSY(RC639/00 ..17)	375	4822 736 16445	DIRECTIONS FOR USE (EXEPT RC639)
201	4822 459 05092	DETACHABLE UNIT ASSY(RC669/00)	375	4822 736 16474	DIRECTIONS FOR USE (ONLY RC639/
212	4822 418 10123	DETACHABLE UNIT'S CASE	385	4822 071 21003	FUSE BLADE 10A



Miscellaneous			II		
1170	4822 210 10741	TUNER IC96 8SV	2319	4822 126 13196	100nF 10% 0805 X7R 25
1400	4822 265 10899	CONNECTOR BLOCK	2320	4822 126 13196	100nF 10% 0805 X7R 25
1440	4822 256 30483	CONNECTOR LAMP	2321	5322 122 34098	10nF10% X7R 63V
1501	4822 265 11286	CONN. 12P	2322	5322 122 34098	10nF10% X7R 63V
II			2323	5322 122 34098	10nF10% X7R 63V
			2324	5322 122 34098	10nF 10% X7R 63V
2181	5322 122 32531	100pF 5% NP0 50V	2325	5322 122 34098	10nF 10% X7R 63V
2182	5322 122 32654	22nF10% X7R 63V	2326	5322 122 34098	10nF 10% X7R 63V
2183	5322 122 32654	22nF10% X7R 63V	2327	5322 122 34098	10nF 10% X7R 63V
2185	5322 122 34123	1nF10% X7R 50V	2328	5322 122 34098	10nF 10% X7R 63V
2202	4822 124 23582	220μF 10V	2329	4822 124 23282	1μF 20% 50V
2203	4822 124 41017	10μF 16V	2333	5322 122 34098	10nF 10% X7R 63V
2204	4822 124 23504	2.2μF 20% 50V	2401	5322 122 34098	10nF 10% X7R 63V
2205	4822 126 13343	47nF10% X7R 25V	2402	4822 124 11952	100μF 20% 16V
2206	4822 126 13196	100nF 10% 0805 X7R 25V	2403	4822 126 13196	100nF 10% 0805 X7R 25V
2207	4822 126 13196	100nF 10% 0805 X7R 25V	2404	4822 124 22646	47μF 20% 16V
2208	4822 122 33127	2,2nF10% X7R 63V	2405	4822 126 13196	100nF 10% 0805 X7R 25V
2209	4822 124 23504	2.2μF 20% 50V	2406	4822 124 80769	2200μF 20% 16V
2210	4822 126 13343	47nF10% X7R 25V	2407	4822 124 80769	2200μF 20% 16V
2211	5322 126 10223	4,7nF10% X7R 63V	2409	4822 126 13849	220nF 10% 16V
2212	4822 126 13196	100nF 10% 0805 X7R 25V	2410	4822 124 22646	47μF 20% 16V
2213	4822 126 13196	100nF 10% 0805 X7R 25V	2411	4822 126 13196	100nF 10% 0805 X7R 25V
2214	4822 122 33127	2,2nF10% X7R 63V	2412	4822 126 13196	100nF 10% 0805 X7R 25V
2215	4822 124 23504	2.2μF 20% 50V	2413	4822 126 13196	100nF 10% 0805 X7R 25V
2216	4822 124 23504	2.2μF 20% 50V	2415	5322 122 32654	22nF 10% X7R 63V
2217	4822 124 23504	2.2μF 20% 50V	2416	4822 124 23282	1μF 20% 50V
2218	4822 124 23504	2.2μF 20% 50V	2417	4822 124 23279	22μF 20% 16V
2220	4822 126 13196	100nF 10% 0805 X7R 25V	2418	4822 124 23279	22μF 20% 16V
2222	4822 126 13196	100nF 10% 0805 X7R 25V	2419	4822 124 41017	10μF 16V
2223	4822 124 23504	2.2μF 20% 50V	2420	4822 124 23279	22μF 20% 16V
2225	4822 124 23504	2.2μF 20% 50V	2421	4822 124 11952	100μF 20% 16V
2226	4822 124 23504	2.2μF 20% 50V	2422	5322 122 32654	22nF 10% X7R 63V
2227	5322 122 34098	10nF10% X7R 63V	2423	5322 122 34098	10nF 10% X7R 63V
2228	4822 124 23282	1μF 20% 50V	2425	5322 122 34098	10nF 10% X7R 63V
2229	4822 124 23282	1μF 20% 50V	2427	4822 126 13196	100nF 10% 0805 X7R 25V
2230	4822 126 13196	100nF 10% 0805 X7R 25V	2428	4822 126 13849	220nF 10% 16V
2231	4822 124 23504	2.2μF 20% 50V	2470	5322 122 32531	100pF 5%NP0 50V
2232	5322 122 34123	1nF10% X7R 50V	2471	5322 122 32531	100pF 5%NP0 50V
2234	4822 124 23504	2.2μF 20% 50V	2473	5322 122 34123	1nF10%X7R 50V
2235	4822 126 13343	47nF10% X7R 25V	2476	5322 122 34098	10nF10%X7R 63V
2260	5322 122 31863	330pF 5% NP0 50V	2477	4822 126 13343	47nF10% X7R 25V
2261	5322 116 80853	560pF 5% NP0 63V	2500	5322 122 32654	22nF10%X7R 63V
2262	4822 124 23504	2.2μF 20% 50V	2501	5322 122 34098	10nF10%X7R 63V
2263	4822 126 13196	100nF 10% 0805 X7R 25V	2502	5322 122 32654	22nF10%X7R 63V
2264	4822 126 13692	47pF 1% NP0 63V	2503	5322 122 34123	1nF10%X7R 50V
2265	4822 126 13695	82pF 1% NP0 63V	2505	5322 122 32654	22nF10%X7R 63V
2266	4822 126 13196	100nF 10% 0805 X7R 25V	2508	5322 122 34123	1nF10%X7R 50V
2300	4822 124 22646	47μF 20% 16V	2517	5322 122 32531	100pF 5%NP0 50V
2301	4822 124 22646	47μF 20% 16V	II		
2302	4822 124 41017	10μF 16V			
2303	4822 124 23282	1μF 20% 50V	3175	4822 051 20102	1KΩ 5% 0,1W
2304	4822 124 23282	1μF 20% 50V	3178	4822 051 20008	0Ω JUMP. (0805)
2305	4822 124 23282	1μF 20% 50V	3179	4822 051 20008	0Ω JUMP. (0805)
2306	4822 124 23282	1μF 20% 50V	3181	4822 117 10833	10KΩ 1% 0,1W^
2309	4822 126 13196	100nF 10% 0805 X7R 25V	3182	4822 051 20562	5K6 5% 0,1W 0805
2311	5322 122 32268	470pF 10% 50V	3183	4822 051 20273	27KΩ 5% 0,1W
2313	5322 122 32268	470pF 10% 50V	3184	4822 051 20008	0Ω JUMP. (0805)
2314	5322 122 32268	470pF 10% 50V	3200	4822 051 20472	4K7 5% 0,1W
2315	5322 122 32268	470pF 10% 50V	3201	4822 051 20472	4K7 5% 0,1W
2317	4822 126 13196	100nF 10% 0805 X7R 25	3202	4822 051 20008	0Ω JUMP. (0805)

					
3203	4822 051 20008	0Ω JUMP. (0805)	3446	4822 117 10834	47KΩ 1% 0,1W
3204	4822 051 20008	0Ω JUMP. (0805)	3447	4822 051 20104	100KΩ 5% 0,1W
3206	4822 051 20334	330KΩ 5% 0,1W	3448	4822 117 11504	270Ω 1% 0,1W
3207	4822 117 10833	10KΩ 1% 0,1W	3449	4822 117 10834	47KΩ 1% 0,1W
3208	4822 117 10833	10KΩ 1% 0,1W	3450	4822 051 20105	1MΩ 5% 0,1W
3209	4822 051 20008	0Ω JUMP. (0805)	3451	4822 051 20105	1MΩ 5% 0,1W
3233	4822 051 20334	330KΩ 5% 0,1W	3452	4822 051 20105	1MΩ 5% 0,1W
3234	4822 117 10833	10KΩ 1% 0,1W	3453	4822 117 10834	47KΩ 1% 0,1W
3235	4822 051 20223	22KΩ 5% 0,1W	3460	4822 051 20008	0Ω JUMP. (0805)
3236	4822 051 20683	68KΩ 5% 0,1W	3471	4822 116 40267	3Ω 25% 20V
3237	4822 051 20104	100KΩ 5% 0,1W	3472	4822 051 20101	100Ω 5% 0,1W
3238	4822 051 20472	4K7 5% 0,1W	3473	4822 051 20101	100Ω 5% 0,1W
3239	4822 051 20472	4K7 5% 0,1W	3475	4822 051 20008	0Ω JUMP. (0805)
3260	4822 117 11449	2K2 1% 0,1W	3476	4822 051 20008	0Ω JUMP. (0805)
3300	4822 117 10833	10KΩ 1% 0,1W	3481	4822 051 20331	330Ω 5% 0,1W
3302	4822 051 20472	4K7 5% 0,1W	3483	4822 051 20101	100Ω 5% 0,1W
3306	4822 051 20102	1KΩ 5% 0,1W	3484	4822 051 20101	100Ω 5% 0,1W
3307	4822 117 10833	10KΩ 1% 0,1W	3485	4822 051 20102	1KΩ 5% 0,1W
3308	4822 117 10833	10KΩ 1% 0,1W	3489	4822 051 20008	0Ω JUMP. (0805)
3309	4822 051 20333	33KΩ 5% 0,1W	3494	4822 117 11449	2K2 1% 0,1W
3312	4822 051 20008	0Ω JUMP. (0805)	3500	4822 117 10833	10KΩ 1% 0,1W
3313	4822 051 20008	0Ω JUMP. (0805)	3501	4822 117 10833	10KΩ 1% 0,1W
3316	4822 117 10833	10KΩ 1% 0,1W	3502	4822 117 10833	10KΩ 1% 0,1W
3317	4822 051 20109	10Ω 5% 0,1W	3503	4822 117 10833	10KΩ 1% 0,1W
3318	4822 051 20109	10Ω 5% 0,1W	3504	4822 117 10833	10KΩ 1% 0,1W
3319	4822 051 20109	10Ω 5% 0,1W	3505	4822 051 20102	1KΩ 5% 0,1W
3320	4822 051 20109	10Ω 5% 0,1W	3509	4822 117 10833	10KΩ 1% 0,1W
3321	4822 051 20109	10Ω 5% 0,1W	3510	4822 117 10833	10KΩ 1% 0,1W
3322	4822 051 20109	10Ω 5% 0,1W	3511	4822 117 10833	10KΩ 1% 0,1W
3323	4822 051 20109	10Ω 5% 0,1W	3518	4822 117 10833	10KΩ 1% 0,1W
3324	4822 051 20109	10Ω 5% 0,1W	3519	4822 117 10833	10KΩ 1% 0,1W
3325	4822 117 10833	10KΩ 1% 0,1W	3520	4822 117 10833	10KΩ 1% 0,1W
3326	4822 117 10833	10KΩ 1% 0,1W	3521	4822 117 10833	10KΩ 1% 0,1W
3329	4822 116 10062	470Ω 50% 16V PTC 0805	3522	4822 117 10833	10KΩ 1% 0,1W
3398	4822 051 20008	0Ω JUMP. (0805)	3523	4822 051 20223	22KΩ 5% 0,1W
3409	4822 051 20104	100KΩ 5% 0,1W	3524	4822 117 10833	10KΩ 1% 0,1W
3410	4822 051 20333	33KΩ 5% 0,1W	3525	4822 051 20109	10Ω 5% 0,1W
3411	4822 051 20393	39KΩ 5% 0,1W^	3528	4822 117 10833	10KΩ 1% 0,1W
3412	4822 051 20229	22Ω 5% 0,1W	3529	4822 051 20102	1KΩ 5% 0,1W
3413	4822 117 10834	47KΩ 1% 0,1W	3530	4822 051 20102	1KΩ 5% 0,1W
3414	4822 117 10834	47KΩ 1% 0,1W	3531	4822 051 20102	1KΩ 5% 0,1W
3416	4822 117 10834	47KΩ 1% 0,1W	3532	4822 051 20102	1KΩ 5% 0,1W
3417	4822 051 20472	4K7 5% 0,1W	3533	4822 117 10833	10KΩ 1% 0,1W
3420	4822 051 20681	680Ω 5% 0,1W	3534	4822 117 10833	10KΩ 1% 0,1W
3421	4822 117 11449	2K2 1% 0,1W	3535	4822 117 10833	10KΩ 1% 0,1W
3422	4822 051 20224	220KΩ 5% 0,1W	3536	4822 051 20102	1KΩ 5% 0,1W
3423	4822 051 20474	470KΩ 5% 0,1W	3537	4822 051 20102	1KΩ 5% 0,1W
3424	4822 051 20184	180KΩ 5% 0,1W	3538	4822 051 20102	1KΩ 5% 0,1W
3425	4822 051 20224	220KΩ 5% 0,1W	3540	4822 051 20109	10Ω 5% 0,1W
3426	4822 051 20392	3K9 5% 0,1W	3541	4822 117 10834	47KΩ 1% 0,1W
3427	4822 051 20223	22KΩ 5% 0,1W	3542	4822 117 10833	10KΩ 1% 0,1W
3428	4822 051 20229	22Ω 5% 0,1W	3680	4822 117 11449	2K2 1% 0,1W
3429	4822 117 10833	10KΩ 1% 0,1W	3681	4822 051 20104	100KΩ 5% 0,1W
3431	4822 051 20104	100KΩ 5% 0,1W	3682	4822 051 20333	33KΩ 5% 0,1W
3432	4822 117 10833	10KΩ 1% 0,1W	3683	4822 117 10833	10KΩ 1% 0,1W
3435	4822 051 20472	4K7 5% 0,1W	3729	4822 117 10833	10KΩ 1% 0,1W
3436	4822 051 20472	4K7 5% 0,1W	3737	4822 117 10833	10KΩ 1% 0,1W
3439	4822 117 11449	2K2 1% 0,1W	3740	4822 051 20153	15KΩ 5% 0,1W
3440	4822 117 10834	47KΩ 1% 0,1W	3748	4822 051 20008	0Ω JUMP. (0805)
3445	4822 051 20008	0Ω JUMP. (0805)	3753	4822 051 20008	0Ω JUMP. (0805)

			 		
3755	4822 051 20008	0Ω JUMP. (0805)	7415	4822 130 60511	BC847B
3757	4822 117 10833	10KΩ 1% 0,1W	7416	4822 130 60511	BC847B
3762	4822 051 20008	0Ω JUMP. (0805)	7417	4822 130 10839	2SD2061
3763	4822 117 10834	47KΩ 1% 0,1W	7418	4822 130 10839	2SD2061
3764	4822 117 10833	10KΩ 1% 0,1W	7420	5322 130 60508	BC857
3765	4822 117 10833	10KΩ 1% 0,1W	7500	4822 209 16898	TMP87CM21F
3767	4822 117 10833	10KΩ 1% 0,1W	7501	4822 900 11262	ST24W16 - RC639/00../17
3800	4822 051 20229	22Ω 5% 0,1W	7501	4822 900 11268	ST24W16 - RC634/00
3801	4822 051 20229	22Ω 5% 0,1W	7501	4822 900 11269	ST24W16 - RC669/00
			7680	4822 130 60511	BC847B
 					
5172	4822 157 10975	120μH 10%	FRONT PARTS		
5173	4822 157 71184	10μH 10%			
5260	4822 242 80259	LN-G38-311 (4,332MHZ)			
5261	4822 157 71206	BLM21A601SPT			
5420	4822 157 70935	COIL ASSY 97μH 10A			
5421	4822 158 10471	0,22μH 20% 4X9,8			
5500	4822 157 11207	EL0405RA-102K-3			
5501	4822 242 10753	CSTCS8,00MT-TC			
 					
6200	4822 130 83757	BAS216	1900	4822 276 13999	SWITCH
6402	4822 130 83757	BAS216	1901	4822 276 13999	SWITCH
6403	4822 130 83757	BAS216	1902	4822 276 13999	SWITCH
6404	4822 130 10488	S3G	1903	4822 276 13999	SWITCH
6407	4822 130 10877	UDZ9.1B	1904	4822 276 13999	SWITCH
6408	4822 130 10185	UDZ5.6B	1905	4822 276 13999	SWITCH
6409	4822 130 10655	1SR154-400	1906	4822 276 13999	SWITCH
6410	4822 130 10655	1SR154-400	1907	4822 276 13999	SWITCH
6412	4822 130 83757	BAS216	1908	4822 276 13999	SWITCH
6413	4822 130 83757	BAS216	1909	4822 276 13999	SWITCH
6473	4822 130 10185	UDZ5.6B	1910	4822 276 13999	SWITCH
6474	4822 130 10185	UDZ5.6B	1911	4822 276 13999	SWITCH
6478	4822 130 10655	1SR154-400	1912	4822 276 13999	SWITCH
6506	4822 130 83757	BAS216	1915	4822 276 13999	SWITCH
6510	4822 130 10185	UDZ5.6B	1916	4822 276 13999	SWITCH
6511	4822 130 10185	UDZ5.6B	1917	4822 276 13999	SWITCH
6512	4822 130 10185	UDZ5.6B	1940	4822 134 10014	115MA 5V ORANGE
6513	4822 130 10185	UDZ5.6B	1941	4822 134 10014	115MA 5V ORANGE
6514	4822 130 10185	UDZ5.6B	1942	4822 134 10015	115MA 5V GREEN
6515	4822 130 10185	UDZ5.6B	1943	4822 134 10015	115MA 5V GREEN
6516	4822 130 10185	UDZ5.6B			
6680	4822 130 83757	BAS216			
 					
7200	4822 209 12723	TDA7342	2900	5322 122 32654	22nF 10% X7R 63V
7230	4822 209 83159	LA2000 (SANYO)	2901	5322 122 32654	22nF 10% X7R 63V
7260	4822 209 31981	SAA6579T	2902	5322 122 32654	22nF 10% X7R 63V
7302	4822 209 33629	TDA7375	2903	5322 122 32654	22nF 10% X7R 63V
7303	4822 209 33629	TDA7375			
7402	4822 209 15418	L4949ED			
7403	4822 130 60511	BC847B			
7404	5322 130 60508	BC857B			
7405	4822 130 40995	BD438			
7407	4822 130 60511	BC847B			
7409	5322 209 14477	HEF4013BT			
7410	5322 130 60508	BC857B			
7411	4822 130 40995	BD438	3900	4822 051 20122	1K20 5% 0,1W
7412	4822 130 60511	BC847B	3901	4822 051 20101	100Ω 5% 0,1W
7414	5322 130 60508	BC857B	3902	4822 051 20122	1K20 5% 0,1W
			3903	4822 117 11503	220Ω 1% 0,1W
			3904	4822 051 20561	560Ω 5% 0,1W
			3905	4822 051 20101	100Ω 5% 0,1W
			3906	4822 051 20223	22KΩ 5% 0,1W
			3907	4822 051 20223	22KΩ 5% 0,1W
			3908	4822 051 20223	22KΩ 5% 0,1W
			3909	4822 051 20223	22KΩ 5% 0,1W
			3910	4822 117 10833	10KΩ 1% 0,1W
			3911	4822 117 11503	220Ω 1% 0,1W
			3912	4822 117 11503	220Ω 1% 0,1W
			3913	4822 117 11503	220Ω 1% 0,1W
			3921	4822 117 11503	220Ω 1% 0,1W
			3923	4822 117 11503	220Ω 1% 0,1W
			3925	4822 117 11503	220Ω 1% 0,1W
			3927	4822 051 20331	330Ω 5% 0,1W
			3928	4822 051 20331	330Ω 5% 0,1W
			3929	4822 117 11503	220Ω 1% 0,1W

			Technician's Remarks
3931	4822 117 11504	270Ω 1% 0.1W	
3933	4822 117 11504	270Ω 1% 0.1W	
3942	4822 117 11449	2K2 1% 0,1W	
3943	4822 117 11449	2K2 1% 0,1W	
3946	4822 117 10834	47K 1% 0,1W	
3947	4822 117 10833	10KΩ 1% 0,1W	
3948	4822 051 20008	0Ω JUMP. (0805)	
3950	4822 117 10353	150Ω 1% 0,1W	
3951	4822 117 10353	150Ω 1% 0,1W	
3952	4822 117 10353	150Ω 1% 0,1W	
3953	4822 117 10353	150Ω 1% 0,1W	
3954	4822 117 10353	150Ω 1% 0,1W	
3961	4822 117 11503	220Ω 1% 0.1W	
3962	4822 117 11503	220Ω 1% 0.1W	
3963	4822 117 11503	220Ω 1% 0.1W	
3964	4822 117 11503	220Ω 1% 0.1W	
3965	4822 117 11504	220Ω 1% 0.1W	
3966	4822 117 11504	220Ω 1% 0.1W	
			
6900	4822 130 10185	UDZ5.6B	
6901	4822 130 10185	UDZ5.6B	
6902	4822 130 10185	UDZ5.6B	
6903	4822 130 83757	BAS216	
6904	4822 130 83757	BAS216	
6905	4822 130 83757	BAS216	
6906	4822 130 83757	BAS216	
6907	4822 130 83757	BAS216	
6910	4822 130 10186	LYT670-JK-E9231	
6912	4822 130 10186	LYT670-JK-E923	
6914	4822 130 10186	LYT670-JK-E923	
6916	4822 130 10186	LYT670-JK-E923	
6918	4822 130 10186	LYT670-JK-E923	
6920	4822 130 10186	LYT670-JK-E923	
6922	4822 130 10186	LYT670-JK-E923	
6924	4822 130 10186	LYT670-JK-E923	
6926	4822 130 10186	LYT670-JK-E923	
6928	4822 130 11175	LST670-JK	
6934	4822 130 10186	LYT670-JK-E9231	
6936	4822 130 10186	LYT670-JK-E9231	
6938	4822 130 10186	LYT670-JK-E9231	
6942	4822 130 10186	LYT670-JK-E9231	
6944	4822 130 10186	LYT670-JK-E9231	
6946	4822 130 10186	LYT670-JK-E9231	
6948	4822 130 10186	LYT670-JK-E9231	
 			
7900	5322 209 11306	HEF4094BT	
7901	4822 209 15482	PCF8576CH/F1	
7902	4822 130 42615	BC817-40	
7903	4822 130 42615	BC817-40	
7906	5322 130 60508	BC857B	
7907	4822 130 60511	BC847B	